

Specifically, the Office Action indicates that the “term ‘substantial’ is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention” (Office Action, page 2). Applicants respectfully contend that the specification does provide a standard and guidelines for measuring the degree to which presentation slides are displayed in substantial synchrony with the live portion of the presentation. Specifically, with regard to FIGURE 21, the specification explains that “each script command will be indexed so as to be synchronized with the nearest prior keyframe” (Specification, page 42, lines 19-20). For example, “the script command corresponding to slide 1 will be indexed to a time index value of 8 seconds since the nearest prior keyframe time index value corresponds to an 8 second time index value” (Specification, page 42, lines 27-29). The specification states that “the encoder preferably generates a new keyframe at least every eight seconds” (Specification, page 41, lines 30-31). Thus, when the ASF file is played back, a script command corresponding to a slide display command will cause a slide to display at the closest 8 second keyframe of the live portion of the presentation. Based on this detailed preferred embodiment provided in the specification, one of ordinary skill in the art would know what is meant by “substantial synchrony” (see also, MPEP § 2173.05(b), paragraph D). Accordingly, the rejection under 35 U.S.C. § 112, second paragraph, should be withdrawn.

Claims Rejected Under 35 U.S.C. 103(a) over Dyson in view of Craig

Claims 1-5, 7-13, 16-18, 20-22, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dyson (“Mastering Microsoft Internet Information Server 4,” Sybex, 1997), in view of Craig (U.S. Patent No. 6,108,687). In the interest of reducing the complexity of the issues for the Examiner to consider in this response, the following discussion focuses on amended independent Claims 1, 9, 16, 20, and 24, and the patentability of each remaining dependent claim is not necessarily separately addressed in detail. Applicants’ decision not to discuss the differences between the cited art and each dependent claim should not be considered as an admission that applicants concur with the Examiner that these dependent claims are not patentable over the disclosure in the cited references. Similarly, applicants’ decision not to discuss differences between the prior art and every claim element, or every comment made by the Examiner should not be considered as an admission that applicants concur with the Examiner’s interpretation and assertions. Indeed, applicants believe that all of the claims in the present application patentably distinguish over the references cited. A specific traverse of the rejection of each dependent claim is not required,

1 since dependent claims are patentable for at least the same reasons as the independent claims from
2 which the dependent claims depend.

3 Applicants have amended independent Claims 1, 9, 16, 20, and 24 to clarify that the slide
4 display commands are automatically embedded into the data stream as the data stream is produced.
5 Support is found in the specification as filed at a number of locations. For example, at page 30,
6 lines 16-19, the specification explains that “[a]s the live audio content is captured, it is encoded into an
7 ASF stream 1168 as audio content 1179. At the same time, as the presentation slides are displayed and/or
8 animated during the presentation, slide display commands are generated and embedded into the ASF
9 stream.” Other examples of support include FIGURE 20, page 40, lines 5-12, and page 42, lines 1-33.

10 In contrast, Dyson does not disclose or suggest automatically embedding slide display
11 commands into a data stream as the data stream is produced. Dyson includes an ActiveX Streaming } Ai
12 Format (ASF) editor with which a user can “combine and synchronize images, audio, and script
13 commands . . . into the .asf file as the final product” (Dyson, page 5 of 9, under Using the ASF
14 Editor, 1st paragraph). However, combining script commands with other elements can only be done
15 manually, and only after the images and/or audio are already stored as separate files to be
16 incorporated into an ASF file. For example, Dyson explains that a user “can place event[s] on a
17 timeline, and then the editor presents you with a graphical representation of how your source files are
18 like[ly] to fit within your chosen bandwidth” (see Dyson, page 5 of 9, under Using the ASF Editor,
19 2nd paragraph). More specifically, Dyson teaches: “to add additional files to your .asf file, you can
20 simply drag them from the Content window into the Edit window, or you can click on the Add Files
21 button on the toolbar. The ASF Editor adds a rectangular block to the timeline for each audio or
22 image file you add . . .” (See Dyson, page 3 of 7, under Starting a Project in the Edit Window,
23 6th paragraph.) The reference also teaches that: “the height of a block in the Edit window shows how
24 much of the available bandwidth each file occupies, and th[e] length of the block shows how long it
25 will take to stream the file from the server to the client” (see Dyson, page 3 of 7, under Starting a
26 Project in the Edit Window, 7th paragraph). The manual drag and drop process and the bandwidth
27 determination can only be performed if the audio and/or image files are complete and already exist
28 prior to being added to an ASF file. Thus, script commands cannot be automatically embedded into
29 the data stream of audio and/or video as the data stream is produced. Accordingly, Dyson does not
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1 disclose or suggest applicants' claimed step of automatically embedding slide display commands into
2 a data stream of a live presentation, as the data stream is produced.

3 The Examiner indicates that Craig teaches the claimed step of generating slide display
4 commands corresponding to said slide triggering events. The Examiner concludes that it would have
5 been obvious to one of ordinary skill in the art to combine the teachings of Dyson with the teaching
6 of Craig, because slide display commands allow users to control the order of the slides, and therefore,
7 maximize the presentation's visual capabilities. While these desirable results are achieved with
8 applicants' claimed invention, combining Dyson and Craig does not provide the missing element of
9 automatically embedding slide display commands into a data stream comprising the live presentation.

10 In fact, Craig teaches a synchronization system that is independent of the live presentation.
11 Craig discloses a system that includes a plurality of computer work stations, each running a Web
12 browser application. An instructor applet is executed under a browser application at a first
13 workstation. A student applet is executed under a browser application at one or more other
14 workstations that are in communication with the instructor workstation. "[A]ll participating browsers
15 (running either the instructor or student applet) retrieve a web document that is itself an ordered list
16 of URLs that define the totality of the presentation" (see Craig, col. 3, lines 9-12). When a human
17 instructor selects a slide, the "instructor applet reports the current slide number to [a] synchronization
18 application" (see Craig, col. 3, lines 19-20). "Upon receipt of an update received from the
19 synchronization application (which was triggered by an update from the instructor applet), each of the
20 student applets will instruct its respective browser to retrieve and display the URL designated by the
21 instructor as the current slide..." (see Craig, col. 3, lines 23-28). However, the synchronization
22 application "**has no knowledge of the content of an individual lecture**, only which slide is the
23 current slide" (emphasis added; see Craig, col. 10, lines 29-30). "Indeed, the invention does not
24 preclude a human student from 'wandering off' and browsing outside the realm of the predefined
25 presentation" (Craig, col. 3, lines 39-41). Similarly, a live lecturer can modify the live audio or
26 visual portion for each iteration of the presentation.

27 Thus, Craig does not provide means or motivation to automatically embed a slide display
28 command into a data stream comprising a live portion of a presentation. In particular, there is no
29 means disclosed, or suggestion made by either reference to modify Craig's instructor applet or
30 synchronization application to communicate with a manual editor as provided by Dyson, to

1 automatically insert a slide display command into a data stream such as an ASF file. Furthermore,
2 there is no means disclosed, or suggestion made by either reference to modify Dyson's manual editor
3 to receive slide display commands from an applet or synchronization application, and automatically
4 embed the slide display commands into an ASF file. Such modifications are only evident in
5 hindsight consideration of applicants' invention. Also, even if such modifications were inferred, the
6 modifications would change the principal of operation of Craig's system. Craig's synchronization
7 application and/or student applets would no longer be synchronized with the lecture applet and
8 independent of an individual lecture. Instead, the synchronization application and/or student applets
9 would be synchronized with, and permanently tied to one instance of the live presentation.

10 Accordingly, the rejection under 35 U.S.C. 103(a) of independent Claims 1, 9, 16, 20, and 24
11 over Dyson in view of Craig should be withdrawn. Further, dependent Claims 1-5, 7, 8, 10-13, 17,
12 18, 21, 22, and 25-27 are considered to include all of the elements from which these dependent
13 claims depend. Thus, these dependent claims are patentable for at least the same reasons as the
14 independent claims from which they depend. Accordingly, the rejection of dependent Claims 1-5, 7,
15 8, 10-13, 17, 18, 21, 22, and 25-27 should also be withdrawn.

16 Claims Rejected Under 35 U.S.C. 103(a) over Dyson in view of Klemets

17 Claims 6, 14, 15, 19, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable
18 over Dyson in view of Klemets et al. (U.S. Patent Application No. 2001/0013068). However, as
19 discussed above, Dyson does not disclose or suggest all of the elements of the independent claims
20 from which dependent Claims 6, 14, 15, 19, 27, and 28 depend. Further, Klemets does not disclose
21 or suggest the missing elements of the independent claims. For instance, Klemets does not teach or
22 suggest automatically embedding slide display commands into a data stream comprising the live
23 portion of the presentation, as the data stream is produced. In fact, Klemets states that "video and
24 annotation streams are handled synchronously **but separately** by video decoder 964 and annotation
25 interpreter 963, respectively" (emphasis added, Klemets, [0066]).

26 In addition, Dyson and Klemets do not disclose or suggest all of the elements shared by
27 Claims 6, 14, 15, 19, 27, and 28. For example, Dyson and Klemets do not disclose or suggest a
28 keyframe, or indexing each slide display command to a nearest preceding keyframe time index value.
29 Applicants' specification explains that "[k]eyframes are video frames that comprise new data, while
30 deltaframes comprise data corresponding to the difference between a current frame and its immediately

1 preceding frame. Preferably, each slide display command will be indexed to a nearest preceding
2 keyframe . . ." (Specification, page 7, lines 3-6). In contrast, Klemets does not distinguish any different
3 types of video frames. Klemets simply provides a time stamp for each video frame. Similarly, Klemets
4 provides an event time marker for each annotation frame. Although the video time stamps and annotation
5 event time markers can be made relative to a common time line, the annotation event time markers are
6 independent of the video time stamps. For example, in relation to Figure 7, Klemets explains that a
7 "[f]lipper time track 750 provides a convenient way to select suitable event time marker values, e.g., flipper
8 time markers 751, 752, 753, 754, for the respective event locators" (Klemets, [0053]). However, the flipper
9 time markers are not tied to any video time stamps. Similarly, Dyson provides an edit window that includes
10 a time line for arranging media files, URLs, and script commands (Dyson, Figure 8.1, and page 3 of 7,
11 under Starting a Project in the Edit Window, paragraph 6). Dyson also enables a user to "drop" in image
12 files along the time line while listening to an audio file (Dyson, page 5 of 7, steps 1-6). However, the
13 images are not tied to a time stamp of an audio frame. The images are simply correlated with the same time
14 line as the audio file. Accordingly, the rejection under 35 U.S.C. 103(a) of Claims 6, 14, 15, 19, 27,
15 and 28 should be withdrawn.

16 In consideration of the Amendments entered above and the preceding Remarks, it should be
17 evident that all claims in the present application define a novel and non-obvious invention. Since the
18 application is now in condition for allowance, the Examiner is asked to pass it to issue without further
19 delay. Should any questions remain, the Examiner is asked to telephone applicants' attorney at the
20 number listed below.

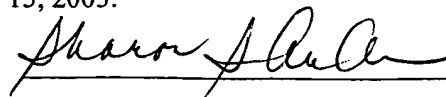
21 Respectfully submitted,

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26 I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed
27 envelope as first class mail with postage thereon fully prepaid addressed to: Commissioner for Patents, P.O.
28 Box 1450, Alexandria, VA 22313-1450, on September 15, 2003.

29 Date: September 15, 2003


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